

METHOD FOR PRODUCING A FREEZE-CAST SUBSTRATE

Abstract of Disclosure

One method of the present invention includes introducing a slurry into a mold unit comprised of a mold contained within a casting receptacle and lowering the temperature of the slurry to freeze the slurry and form a freeze-cast substrate while controlling temperature gradients within the mold unit to minimize distortion in the freeze-cast substrate. Another method includes introducing a slurry into a mold unit comprised of a mold contained within a casting receptacle, placing insulation material around at least a portion of the casting receptacle to minimize distortion in the freeze-cast substrate by controlling temperature gradients within the mold unit, and lowering the temperature of the slurry to freeze the slurry to form a freeze-cast substrate.

